Notebook, N-99-05-23

N-99-05-23

2500
80
200000

80
30
2400

$ 24000

4000 bbls 80 Griffin Mills

130
6
780

75 70- 6-

20) 4000 (200 Hours
40

5) 200
40-

Cement Notes

May 23, 1899
F. R. Upton

28-

1995
218

218
50
1090

46.8
25.0
21.8 -

500
109
39.1 -

Lehigh clinker run through Corrugated Rolls 30 lbs air pressure Sample taken near middle of run 20 Grammes taken

On	100	3.74	18.7	
"	200	6.72	33.6	52.3
Thro	"	9.45	47.25	
		19.91		

Same as above except 45 lbs air

On	100	3.35	16.8	46.8
"	200	6.00	30.	
Thro	200	10.60	53%	
		19.95		

235
144
940
940
235
90)23,8.40
3.76

18
5.5
90
9
99.

say 25'X25'
25
125
50
625
3.76
3750
4375
1875
2350.00
2.35 Kilo
2.2
470
470
5.170 lbs

25—

46—

50—

Box 15"X6" = 90 sq inches
left 30 minutes on floor
collected 2.35 Grammes of float

$\frac{144}{90}$ X 2.35 = 3.76 Grammes per sq foot

This amounts to 5⅕ lbs. on a
space 25'X25'

Box 18"X5½" as above
1.8 Grammes on 99 sq inches

85
64
340
510
5440

225) 534 (23.7
450
840
675
1650

16

1662) 277 (16
1662
11080
2

4) 1300
320

4 485
400
1940

17

485
375
2425
3395
1455
180875

1800
26
10800
3600
46800

22.5 Grammes Lehigh Thro 100
and on 200 pressed 100 Atmos =
11.400 lbs per square inch

on 200 17.13
*. Thro " 5.34 23.7%
22.47

* Material going thro 200 seems quite coarse

The 17.13 Grammes pressed again
on 200 13.85
Thro " 2.77
16.62

2232) 3570 (16
2232
13380
13392

2219) 4520 (20.4
4438
8200

2173) 6700 (30.9
6519
1810

2219) 5670 (25.5
4438
12320
11095
12250

16

383) 20000 (52.2
1915
850
766
840

50
400

13

14-

11
27
77
34

27
11
27
27
297

32

11
23
33
22
253

25
11
25
25
275

14

22.5 Grammes of Lehigh Through 9/1000 and on 100 wire mesh pressed 11.400 lbs per square inch = 100 atmos on 3/4 inch cylinder

1st on 100 11.95
" 200 6.80
Thro " 3.57
22.32
16%

2nd on 100 10.22
" 200 7.35
Thro " 4.52
22.09
20.4%

3rd on 100 9.55
" 200 6.65
Thro " 5.67
21.87
25.5%

4th on 100 8.08
" 200 6.95
Thro " 6.70
21.73
30.9%

11.400
4
4660

380
5
1900

65
5
32·5

10 Grammes of Lehigh clinker
Thro 9/1000 slot on 100 mesh
screen compressed 40 atmospheres
= 4560 lbs. per sq. inch.

on 100	6.88
" 200	2.33
Thro "	0.65
	9·86

Removed ~~0.12~~ 0.12 Gramme "on 200"
and 0.65 "Thro 200" added

.0.12
.0.65
0.14
.91

0.91 "on 100"

Then crushed new mixture
4560 lbs

on 100	6.50
" 200	2.96
Thro "	0.48
	9·94

Removed .012 Grms "on 200" & 0.48 Thro
added 0.56 "on 100".

May 25 1899 15

Lehigh ~~Clinker~~ chipped clinker from over screens. This had been run several times through the rolls and the fines removed in large part by 9/1000 slot screens Probably not a fair sample as fines would be out of reach

100 Grammes Taken

On	.027	round hole	45.75
"	100	mesh	45.90
"	200	"	3.85
Thru	"	"	3.70
			99.20

Test made, see Page 53 other book, on Lehigh Clinker The crushed clinker at rate of 67 Tons an hour was screened this show 42.6% on .027 round hole

50 lbs — pressure 40000 lbs

12" roll 3333 per inch

15 2666

65 lbs 52400

65 lbs 12" 4373

15" 3500

1187
34
4748
4711
3561
40358

475
65
2375
2856
30875

1187
2
3087.5
1543.7
34
6174
4631
52485.8

12) 40000 (3333
36
40
36
40

64
79
576
448
5056
3002
471

12

15) 40000 (2666
30
100
90
100

15

47.50
2
23.75
1187.5

12) 52480 (4373
48
44
36
88
84
40

15) 52480 (3500
45
74
75

50 lbs air Soft Iron Roll 15" across 37 Bbls. an hour

7/1000 screens

Main shaft 186 r.p.m.

Sample #5 taken at end of running rolls 5 minutes.

On 100	1.00	10 %
" 200	3.75	37.5 %
Thru "	5.2	52 %
	9.95	

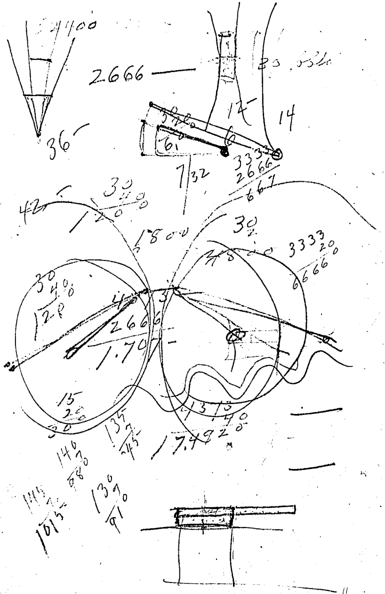
Sample #1 at beginning of run

On 100	2.10	21.0 %
" 200	3.75	37.5
Thru "	4.20	42
	10.05	

Sample #10 end of run 30 minutes

On 100	1.35	13.5 %
" 200	3.75	37.5
Thru "	4.70	47.0
	9.80	

In sample #10 there were quite a number of coarse pieces.


24100
2666
36
12
14
6
61
7/32
3333
2666
667
42
30
1800
3333
6666
2666
1.70
15
20
30
1313
1749
135
140
1015
130
910

50 lbs pressure gives on

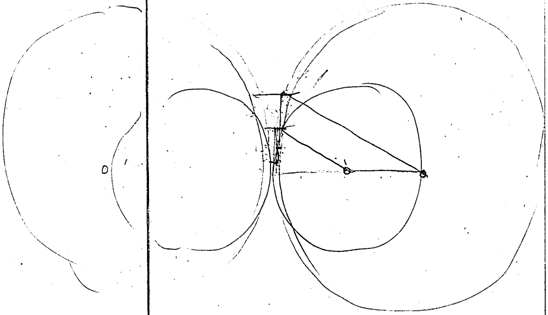
12" Roll 3333 lbs per inch face

15 " 2666 " " "

65 lbs pressure gives on

12" 4373 lbs per inch face

15 3500 "



3

65 lbs air soft rolls

Rolls chattered and broke safety pin after running a few minutes

1 Sample taken

10 Grammes taken

On	100	.67	6.7%
"	200	3.25	32.5
Thru	"	5.95	59.5
		9.87	

#10 Hoxter

20 Grammes taken

On	100	2.32	11.6 %	30.7
"	200	3.82	19.1	
Thru	"	13.75	68.75	
		19.89		

#11 Eagle

20 Grammes taken

On	100	1.70	8.5 %	23.6
"	200	3.02	15.1	
Thru	"	15.17	75.85	
		19.89		

#12 Hannover

On	100	2.74	13.7	
"	200	3.12	15.6	29.3
Thru	"	14.04	70.2	
		19.90		

#13 Anchor

On	100	2.72	13.6	29.35
"	200	3.15	15.75	
Thru	"	14.02	70.1	
		19.89		

Rolls corrugated lengthwise of shaft

65 lbs air

20 Grammes Taken after few minutes run

2

on	100	0.67	6.7 %	
"	200	2.50	25.0	31.7
Thru	"	67.5	67.5	
		10.12		

Rolls opened about 5/16"

5 sample Taken immediately after stopping rolls

on	100	0.38	3.8 %	
"	200	2.73	27.3	31.1
Thru	"	6.82	62.2	
		9.93		

Last of the run from screens

on	100	0.80	8. %	46.7
"	200	3.87	38.7	
Thru	"	5.16	56.6	
		9.83		

74.7
87
5229
5976
64989

~~85~~ 74.7
~~87~~ 2.5
3725
1494
1.8665

100
41.7
583
787
4081
4664
4081
45882

583
106
3498
583
61798

Some of the clinker over screens after run with corrugated rolls taken — 100 Grammes taken

On .027 round hole 25.3 Grammes

10 Grammes of Thru .027 Taken

on 100	8.70	8.7%
" 200	1.00	10.
Thru "	0.25	2.5
	9.95	

On .027	25.3	%
" 100	65.0	"
" 200	7.5	"
Thru 200	1.9	"
	99.7	" see page 15

65
4
81.55

Beginning of run taken at roller feed

100 Grammes taken

On .027 round hole 41.7 Grammes 41.7%

10 Grammes of Thru .027 Taken

on 100	7.87	45.9 "
" 200	1.06	6.2 "
Thru "	1.00	5.8 "
	9.93	99.6

~~Bd~~ Sample Taken from Roller Feed just before the rolls stopped

100 Grammes

On .027 Screen 42.35 Grammes

10 Grammes of Thru .027 taken

On 100 7.25

" 200 1.25

Thru " 1.48

9.98

52.5
53.0
30.3
3) 135.8
45.26

10000
45.26
54.74
30
24.74
1
5.4 –

25 | 200 (80

65
24
260
130
1560

80

10000
5370
4630

65
17
455
65
1105

65
5
325

47

65
8
520

6500
1560
4940

2.5

1630 –
1600
40
3)

17

47 – Coarse
30
17 –

64
39
576
192
2496
69 –

65 | 160 –
130
365
32

80
16
4
6

64
25
39

65
16
49 –

75

50 –

75
70
52.5

54
39 –
2) 93
46.5

2475
65
12375
14850
160875

80 lbs air – on corrugated Rolls
65 Bbls thru 9/1000 slots per hour. Speed shaft 185 r.p.m.

No. 1 at the start. 10 Grammes taken

on	100	1.65	
"	200	3.08	
Thru	"	5.25	~~2~~ 52.5
		9.98	

No 2

on	100	1.65	
"	200	3.00	
Thru	"	5.30	53.0%
		9.95 –	

No 3

on	1,00	1.75	17.5%
on	200	2.76	27.6
Thru –		5.37	53.7
		9.88	

No. 4 10 Grammes Taken

on	100	3.52	35.2 %
"	200	3.40	34.0 "
Thru	"	3.03	30.3 "
		9.95	

714
216
4284
714
1428
154224

714
812
4998
714
5712
583338

1000
48.4
51.6
30.0
21.6

71.40
18.15
3570
714
71.2
571.0

714
784
2856
5712
4998
559776

71.4
15.4
56.1

71
.210
5

100
51.85
48.1
30.0
18.1
1

714
129591.00
714
1295
584

20.

71
3.0
213

47

80.

16

415
535
50.2
3 | 1452
48.4

535
50.2
2 | 1037
51.85

80.2
83.5
71.5
3 | 2352
78.4

Ran ~~2~~' – 3"

Main Shaft 205 r.p.m.

air 80 lbs, 71.4 Bbls an hour

#1 shortly after starting

on	100	1.95	19.5 %
"	200	2.95	29.5 "
Thru	"	5.02	50.2 "
		9.92	

#2 Shortly after rolls stopped

on	100	1.92	19.2
"	200	2.68	26.8
Thru	"	5.35	53.5
		9.95	

#3 about 5 minutes

on	100	2.63	26.3
"	200	3.12	31.2
Thru	"	4.15	41.5
		9.90	

30
3
12) 90
84 0
6 0
7.5
200
15000

60-

24-

15

12-

75·66

71.4
222
49.2

49-66

71·4
31·1
714
714
2142
22205-4

6169
65
845
1014
109.85

6500
1098
54.02

1000
48.9
51.1
20.0
3 1.

52.5
530
53.7
3) 159.2
53.1

7140
1496
56.44

46.9
300
16.9

50.2
53.5
43
3) 146.7
~~[illegible]~~
48.9

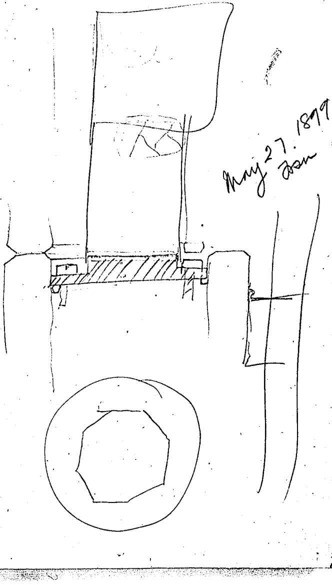
.56
20
11.2

250
20
50.00

66
3
13
66 = 79.211
20
132

714
714
714
1428
149.654

51.1
300
21.1



May 27. 1899
Jsm

No 9 Bonneville

on 100	1.67	8.35%	2783
" 200	3.90	19.5 "	
Thru "	14.35	71.75"	
	19.92		

50

80
80 200
160
64
6

16- 3,

200-

7' 8" 75
3
90- 225
200
4500

3)1300
430 ft-

75
200
000

3 ton-ft- 300, ton
12-

65
20
1300

2 325 5)6500
20)1300 (65
120
100

60
400
2400

Test Pats given to Mr. Edison by Mr. Bonneville
Bonneville No 2, 720-782 lbs
" Star No. 1 920-1300 "

[illegible]

See Page 103 other Book

	on 100	100-200	Total on 200	Thru 200
# 1 Alsens	8.4	13.5	21.9	77.
# 2 New atlas	9.2	14.8	24.0	75.2
# 3 Edison	3.9	22.0	25.9	73.6
# 4 Dyckerhoff	11.6	27.5	39.1	61.4
# 5 Old atlas	8.8	19.8	28.6	71.4
# 6 Vulcanite	8.0	18.7	26.7	74.0
# 7 Giant	8.9	14.9	23.8	74.6
# 8 Lehigh	6.6	14.0	20.6	79.0
New screen				
# 9 Bonneville	835	19.5	27.85	71.75
10 Hoxter	11.6	19.1	30.7	68.75
11 Eagle	8.5	15.1	23.6	75.85
12 Hannover	13.7	15.6	29.3	70.2
13 anchor	13.6	15.75	29.35	70.1
14 Alsen Old				

333) 2589. (77.7 $\frac{12}{400} = \frac{3}{100} = \frac{1}{33.3}$
2331
2580
2331
2590

777
23.7
5439
2331
1554
185149

77.7
18.5
61.2

333) 2090 (62.8
1998
920
666
2540

100
25.9 %
741
62.8 Bbls
5928
1482
5046
524348

May 31, 1899

Test 80 lbs air

77.7 Bbls? 2589 lbs in 5'

On 100	191	19.1 %	43.7
" 200	247	24.7	
Therm "	550	55	
	9.88		

61.2 Bbls per hour of 80% on 200

Test 100 lbs air 2090 lbs in 5'

on 100	2.00	20 %	
" 200	~~2~~59	25.9	45.9
Therm 200	5.30	53	
	9.89		

1254
989
~~2~~45

52.4 Bbls per hour of 80% on 200

June 1   2-45 P.M started

No 1 2 Grms Lehigh Thru 200 mesh
stirred every minute for ten
minutes. Then five minutes
End 15' – 1 3/4" – stirred
20'   1 7/8"   "
30'   1 1/2"   "
45   1 1/2   "
1' 00   1 1/2   "
4-30   1 7/16

June 1, 2-45 P.M started
No. 2. 2 Grms Lehigh Thru 200 mesh
Stirred twice first five
minutes then every five minutes
End 15' – 2 1/4" – stirred
20'   2 3/8"   "
30'   1 7/8"   "
45'   1 3/4   "
1' 00   1 5/8   "
4-30   1 5/8

3-30 P.M

No 3 Edison crushing Lehigh clinker

3 times stirred first five minutes. Then five minutes

3-45 1½

4-15 2¼

No 4 Hercules Fresh **No 6**

No 5 Hercules old **No 7**

025

40
40
1600
40
64000) 37.000.000 (578
320
500
448
520

333
333
999
999
999
110889
333
332667
332667
332667
36926037

578

4-28

No. 8 Second crushing Fresh Hercules

No 9 Hercules Third crusher

No 10 Lehigh Thru 200

No 11 " " " ground a little in mortar

No 12 Lehigh Thru 200
ground a good deal of
time, about 10 minutes,
in a agate mortar

Lehigh Cement

Sifted Thru 7/1000 slot

1st pass 2 coarse 1 Lehigh

on 100 0 06 10.6
" 200 1.
Thru " 8.87
9.93

2nd Pass

on 100 .04 8.5
" 200 .81
Thru " 9.09
9.94

3rd Pass

on 100
" 200
Thru " 8.89

4th Pass on 100 05 8.1
" 200 .77
Thru " 9.10
9.92

5th Pass.

on 100	04
" 200	.72
Thru "	9.17
	9.93

6th Pass

on 100	.05
" 200	75
Thru "	9.12
	9.92

7th Pass

on 100	.03
" 200	1.04
Thru "	8.90
	9.97

8th Pass

Cement Test No 1

Neat Lehigh Cement 25% water
Friday moulded out of mould too quick
Saturday In water
3 days 390 lbs

No. 2. Neat Edison Thru 7/1000 slot
25% water
Friday moulded out of mould too quick
Saturday In water
3 days ~~150 lbs~~
130 "
160 "

No. 3.
15 oz. Quartz sand
3 oz. Alsen cement
35 cc. water
Moulded 10 Am June 5
Day
out of mould 11-45 Am " "
not long enough.
water
Tuesday June 6

Broken Monday June 12 10-45 Am
21 lbs all at clamps
25 "
35 "
3) 71
23.75

28.35
125

125
~~125~~
~~625~~
~~125~~

1 oz = 28.35 Grams) 8~~7~~5

2835
15
14175
2835
42525

4253) 35.000 (82
~~35~~ 024
976

4253) 40000 (94
38277
17230

28.35
3.5
14170
8505
99220
99

28.35) 100 (35
8505
14950

3½ oz
35

No. 4 12½ oz. Quartz
2½ oz. Alsens 8.2%
35 cc water about right
a little dry.
Moulded 10 A.M. Monday June 5
2-30 P.M. broke two pats in
Taking out of moulds
3-30 broke last one

#5. 12½ oz Quartz
2½ " Alsens
40 cc water = 9.4% - right
mould 12 m June 5, Monday
water " 6 Tuesday

June 12 32 lbs
34 "
average 33

Alsen cement tried in tubes
of water. 2 Grammes taken June 2
of (7) Thru 200 mesh
(6) " 190 on 200
(5) " 180 " 190
(4) " 170 " 180
(3) " 160 " 170
(2) " 150 " 160
(1) " 140 " 150

---

(7) rose immediatly
(3) " very slowly
(1) rose more than (2) at first
(7) rose more than (6) " "
(6) " " " (5) " "
(5) " " " (4) " "
(4) " " " (3) " "

---

after 3 hours all but (3) about
same height

June 3

3 days later after shaking and allowing to subside 20 minutes.

(1) 1 3/8"
(2) 15/16"
(3) 1/4" — 3/8" white over this
(4) 2 1/4"
(5) 1 3/4"
(6) 1 1/2"
(7) 3" ?

---

again shaken Mr. Edison
about 2 hours 30' after.

(1) 1 1/4"
(2) 1 1/8
(3) 3/8
(4) 1 3/4
(5) 1 3/8
(6) 1 1/2
(7) 3 1/8

#6 – 12½ oz quartz
2½ " Atlas new
40 cc water = 9.4 %
amount of water about right.
pats a trifle wetter than alsens
same amount of water.

In moulds 3 P.M. Monday June 5 –
" water Tuesday " 6

June 12 Pulled 54 lbs
43 "
2)97
48.5

Tester pats on glass
3½ oz. Alsen took about 35 cc water
" " Atlas " " 22 " "
" " Edison " " 30 " "
water rose on last pat

25
~~28.5~~

28.25
.14
11300
2825
39550

2835
14
11340
2835
39690

3.5
3
10.5

Mr. Edison decided, as 5+1 pats are very tender and give only 70 lbs after a week in air and water to try future tests 3-1

#7 10½ oz. Quartz
3½ oz. atlas
40 cc. water = 10%
a little cement separated.
Moulded 10-15 Am Wednesday June 7, '99
out mould 12 M. " " "
in water 12.30 Thursday " 8
Broken Wednesday June 14
10-45 Am

95 lbs
83 " at clamps
95 " " "
3)273
91

```
 28.25
    16
169500
 2825
 45200
```

#8
12 oz. Quartz
4 oz. alsen
45 cc. water = 10%
Too little water pats very dry
In mould 11 A.M. Wednesday June 7
Out " 12 P.M. " " 7
in water 12. Thursday " 8
Pulled Wednesday June 14 10-45 A.M.
75 lbs at clamps
60 " " "
39 " "
174
58

#9
made glass 3 1/2 oz of Lehigh
" on 100" 20 cc water 12.30
Thermo 90° 1st set 2-3 hours
near 2nd " 18. "

#10 3 1/2 oz of Lehigh Thermo 200
24 cc water 2-15 P.M.
very dry
4"X4" pat

2825
4
11300

No. 11.–
3½ oz of Lehigh Thru 200
30 cc water
a little too moist
6"×4" pat made on glass

No. 12 – 3 oz Quartz
1 " Lehigh Thru 200
11 cc. water = 11%
Moulded 3 P.M. Wednesday June 7
out mould 5.15 " " "
in water 12 m Thursday " 8

Pulled Wednesday June 14
150 lbs at clamps

4 : 14 :: 10 : 35

10
4)140
35

#13 —

3 oz. Quartz
1 oz. 180–190 Lehigh
10 cc. water = 8 3/4 %

In mixing dry the 180–190 separated. Made good pat —

Moulded 3-20 P.M. Wednesday June 7
out mould 5-15 " " " "
in water 12 Thursday " 8

Pulled Wednesday June 14.

#20 — 20 lbs. at clamps

#14 3½ oz Lehigh on 100

23 cc water

in pat 9 AM Thursday June 8

out moulded 12.30 " "

1 Pat in water Noon Friday " 9

Pulled June 15 - 20 lbs clamps

#15 4 oz Lehigh on 100

30 cc water

a little too much water

pat broke nearly all to pieces

in taking out of mould Noon —

— Noon Thursday June 8

In water " Friday " 9.

#16 2½ oz Quartz
2½ oz Lehigh on 100
20 cc water O.K.,
In mould 9-30 Am Thursday June 8
out " 2-15 P.M " " "
1 pat in water noon Friday " 9
Pulled June 15 – 18 lbs ok

#17 3 oz Quartz
1 oz Lehigh 100-140
10cc water
In mould 10 A.M. Thursday June 8
out " 2 P.M " " "
1 pat in water noon Friday " 9
Pulled June 15 – 16 lbs clamps

#18 3 oz Quartz
1 oz. 150-160 Lehigh
10 cc water
In mould 11-15 Am Thursday June 8
out " 2-30 P.M " "
1 Pat in water noon Friday " 9
Broken in clamp in machine

#19 3. oz Quartz
1 oz 160-170 Lehigh
10 cc water
in mould 11-30 Am Thursday June 8
out " 2-30 P.m " "
1 pat in water noon Friday " 9
Pulled June 15 - 16 lbs clamps

#20 see #13

3 oz Quartz
1 oz Lehigh 180-190
10 cc water
in mould 12 M Thursday June 8
out " 2-30 " " "
1 Put in water noon Friday " 9

Pulled June 15 19 lbs at clamps
See #13 20 "
#22 16
15
70
17½

#21 6 oz Quartz
2 " Lehigh Thru 200
22 cc water
moulded noon Thursday June 8
out mould 2.30 P.M. " " "
Put 2 pats in water noon Friday " 9
Pulled June 15 202 lbs at clamps
223 " at "
425
212½ lbs

10½
3½
14

2825
14
11300
2825
39550

#22 10½ oz Quartz sand
3½ " Lehigh 180-190
35 cc water = 8¾%
moulded 3-30 Thursday June 8
3 pats see #13 & #20 5 pats
out 5-45 P.M " "
in water noon Friday " 9
one broke in clamps in machine
Pulled June 15 16 lbs at clamps
15 " " "
see #20 — 15½

#23 10½ oz. Quartz sand
3½ " Regular Lehigh
40 cc. water = 10%
moulded 4.15 P.M. Thursday June 8
3 pats out 5.45 " " "
in water noon Friday " 9
Pulled June 15 137 lbs clamps
137 " "
153 " ok
427
142

Scheme of Tests

Sift enough each kind of cement to make test.

	2 pats	neat	On 100
	2 or 3 "	1-1	on 100
Omit	3 "	3-1	100-140
	3 "	3-1	160.170
	3 "	3-1	180-190
	3 "	3-1	"Thru 200"
	3 "	3-1	1st run "Thru 200"
	3 "	3-1	2nd " " "
	3 "	3-1	run of cement
	3 "	Same amount of 3-1 "Thru 200" that is in last test	

pull in 7 days

1 day air 6 days water

#24 10½ Oz Quartz
3½ oz 100-140 Lehigh
35 cc water
in mould 9 AM Friday June 9
out " noon " "
in water " Saturday " 10
one pat in air Thursday June 15
June 16 air Broke less than 10 lbs
" " " "
" " —

#25 — 10½ oz Quartz
3½ " 160-170 Lehigh
35 cc water
in mould 9 AM Friday June 9
out " Noon " " "
in water " Saturday " 10
one pat in air Thursday P.M. June 15
June 16 air Broke less than 10 lbs
"

3½ or Lehigh Cement Thru 200

= 3.5 X 8/10 =

or 1/5 less = 2.8 oz.

7/10 oz = 21.77 Grammes

28.25
.7
21.775

10.5
2.8
13.3

28.25
133
8475
8475
2825
375725) 35. (9.2
33 84
1160

35) 13.3 (38
105
280

#26 10½ oz Quartz

3½ oz less 21.75 Grammes of Thru 200 Lehigh

35 cc water 9.2%

Mould 10-15 Am Friday June 9

Two wood – One Brass

This represents the fines in pats 3-1 all coarse left out. Pat from brass mould broken

Out mould 12 m Friday June 9
in water Noon Saturday " 10
one pat in air Thursday June 15-240

Pulled June #6 air 240 clamps
water 215 ok
455
227½

#27 — 10½ Oz Quartz
3½ oz Lehigh First ~~[illegible]~~ ½ out
of 10 oz "Thru. 200" mesh screen
40 cc water
in mould 11-15 AM Friday June 9.
out mould 12 m " " "
in water ~~noon~~ Saturday " 10
one pat in air Thursday June 15 247 lbs at
Pulled June 16 at clamps water 325 "
" " " 318 "
890
297

#28 — 10½ Oz Quartz and ½ ~~[illegible]~~
3½ oz Lehigh 2
out of 10 oz "Thru 200"
40 cc water
in mould 11-45 AM Friday June 9
out 12-30 " " "
in water " Saturday " 10
One pat in air Thursday P.M. Jun 15.
air 269 lbs clamps
water 262 " "
Pulled June 16 " 252 " "
783
261

#29 Alsens

3½ oz On 100

30 cc water ok.

moulded 8-45 Am Saturday June 10
out " 11-30 " " "
in water noon Sunday " 11
Pulled Jun 17 - 105 lbs ok

#30 Same as #29
moulded 8-45 Am Saturday June 9
out " 11-30 " " "
in water noon Sunday " 11
Pulled Jun 17 - 103 lbs at clamps
105

average 104

#31 5 oz Quartz 100
5 oz Alsen on 100
50 cc water
moulded 9 Am Saturday June 10
out " 11-30 " "
2 pats in water noon Sunday " 11
Pulled June 17 - 52 lbs at clamps
51 " "

average 51 1/2 lbs

#32 10 1/2 oz Quartz
3 1/2 oz Alsen cement
50 cc water
wood moulded 10-30 Am Saturday June 10
out " 11-30 " " "
in water noon Sunday " 11
Pulled June 17 162 lbs ok
" 181 " clamps
" 194 " ok
527
176 lbs

#33 10 1/2 oz Quartz
3 1/2 oz Alsens Thon 2nd
wood 50 cc water
Mould 11 Am Saturday June 10
air 12-30 " " "
in water noon Sunday " 11
Pulled ~~Friday~~ Saturday June 17 317 lbs clamp
291 " ok
310. clamps
918
306

#34 10 1/2 oz Quartz
3 1/2 oz Alsen 180-190
40 cc water

Mould 11-20 Saturday June 10
out " 12-30 " " "
in water noon Sunday " 11
Pulled Saturday June 17 45 lbs clamps
46 " ok
45 " "
136
45 1/2

#35 10½ oz Quartz
3½ " Alsen 160-170
35 cc water
Moulded 12-05 Saturday June 10
out " 2-30 " " "
in water noon Sunday " 11
Pulled June 17 32 lbs clamp
34 " "
35 " "
3) 101
33⅔

#36 10½ oz Quartz
3½ oz Alsen 100-140
35 cc water
wood moulded 12-20 Saturday June 10
out 2-30 " " 11
very tender in water noon Sunday "
Less than 10 lbs June 17
" " 22 " " "
" " 24 " " "
3) 56
19 lbs

#37 10½ oz Quartz
3½ oz Alsen less 21.75 Grams
35 cc water
moulded 12-45 Saturday June 9
out 2. 30 " " 12
in water noon Sunday " 11
8 Days Pulled Monday 184 lbs ok
157 " "
265 " "
(606
202 lbs

#38 10½ oz Quartz
3½ oz Alsen first run
from 11 oz Alsen "Thru 200"
40 cc water
moulded 3-P.M Saturday June 10
out mould 4.30 " " "
in water noon Sunday " 11
Pulled June 276 lbs clamp
269 " ok
315. " "
(860
287

#39 10½ oz Quartz

3½ Alsen second run

from 11½ oz "Thru 200"

40 cc water

moulded 3+P.M Saturday June 10

out mould 4-30 Sunday " 11
in water noon

Pulled June 17 232 lbs clamps
224 " OK
213 " "

3 | 669 223

#40 10½ oz Quartz

3½ oz Edison Thru 7/1000 slot

35 cc water

in mould 11-45 Am Sunday June 11
out " 1-50 " Monday " 12
in water

70 lbs ok
67 " clamps

Pulled June 18 68½

#41 10½ Ozs Quartz
3½ " Dykerhoff
35 cc water
out mould 12 noon Sunday June 11
in water 1-50 noon Monday " 12
Pulled June 18 128 lbs damp
101 " "
239
119½

#42 10½ oz. Edison sand from pile
3½ oz alsen
50 cc water dry
Moulded 10. AM Monday June 12
in water noon Tuesday " 13
Pulled Monday June 19 65 lbs damp
76 " "
56 " "
197
65⅔

#43, 10½ oz Quartz

3½ oz Dyckerhoff Thru 200
35 cc water

Moulded 11 A M Monday June 12
in water noon Tuesday " 13
Pulled Jun 19. 109 lbs clamps
142 " OK
125 " clamps
376
125 1/3

see #68

#44 10½ oz Quartz Dyckerhoff
3½ oz 1st run Thru 200
35 cc water

Moulded 12 m Monday June 12
in water noon Tuesday " 13
108 lbs clamps
134 " OK
108 " clamps
350
116 2/3

45 10½ oz Quartz
See #69 3½ oz 2nd Dyckerhoff mm Thin [illegible]

35 cc

mixed 12-30 Monday June 12
in water Tuesday " 1.25

Pulled June 19 98 lbs clamps
101 " OK
106 " clamps
305
101⅔

#46 7 oz Dyckerhoff on 100
60 cc water Too much
not enough to make two pats
dry material added to same
pat #46 wet
mixed 12-15 pm Tuesday June 13
in water 11-15 noon Wednesday " 14

#47 Dry broken in taking out
June 20 - 122 lbs OK.

Test of 29" rolls with #2" across wide corrugations and large rolls June 13

80 lbs. air 10 Grammes taken

On	100	1.25	12.5%	40%
"	200	2.75	27.5	
Thru	"	5.85	58.5	
		985	98.5	

Load on, Main Shaft 231 r.p.m.
No " ", " 260 "

Elevator worked badly
Savoy said too fast speed

28.25
16
169.50
2825
45200)650(14.4
452
1980
1808
1720

#48 8 oz Quartz
8 oz Dyckerhoff on 100
65 cc water = 14.4
in moulds 10 am Tuesday June 13
out " 11-30 " "
in water noon Wednesday " 14
Pulled June 20 46 clamp
58 "
54 ok
158
52 2/3

49 10½ Quartz
3½ Dyckerhoff Thru 200
35 cc water Dry
In mould 11-30 Tuesday June 13
out " " 1 —
2 Brass mould
1 wood
in water noon Wednesday " 14
Pulled June 20 81 lbs clamps
108 " "
99 " "
288
96

#50 10½ Quartz
3½ Dyckerhoff Thru 200
45cc Water OK
moulded 2-P.M. Tuesday June 13
out
in water 3 noon " Wednesday " 14
Pulled June 20 170 clamp
205 OK
181 clamp
556
185⅓

#55 10½ oz Quartz
3½ oz Dyckerhoff Thru 200
55 cc water - water -
- rose to top
mould 3-00 P.M Tuesday June 13
out 5- " " "
in water noon Wednesday " 14
213 lbs OK
193 "
203 "
609
203

28.25
6
169.50

60 10 1/2 oz Edison Sand
3 1/2 oz Alsen
60 cc water a little water

room moulded 3-45 P.M Tuesday June 13
out
in water 5 noon " Wednesday " 14
Pulled June 20 - 109 lbs ok
121 " clamp
73 " ok
303
101

61 4 1/2 oz Quartz
1 1/2 oz Alsen Thru 200
added 10 cc water powdery
not moist
15 cc coheres slightly and
does not wet the tins!
21 cc ~~about~~ right
amount to work well
25 cc still right a
little watery apparently
30 cc mushy
35 " watery
40 " water runs out of mass made
pat on glass Two hours final set.

#62 4½ oz Quartz
1½ oz Eagle Thin Zoo

added water
10 cc Dry ~~not~~ powdery
17 " "
20 " very fair
25 " good but wet water
rises to top of ~~#~~ mass on
patting

31 cc mushy
36 ~~[illegible]~~ & watery ~~[illegible]~~
43 water run out
Made pat on glass
After 11 hours not firm set

#63 2 1/2 oz Quartz
1 1/2 oz [illegible] Thru 200

10 cc water dry powdery
15 " " just caking
20 " " right just wet
25 " " rose to top
30 mushy
35 watery
40 " ~~st~~ separated
made pat on glass.
after 16 hours not dried out

226) 55 (24.3
452
980
904
76

---

see No. 46

64. 8 oz. Dyckerhoff on 100

55 cc water = 24.3%

Moulded 10-15 AM Wednesday June 14
out 12-30 " " " "
water June 15

Pulled June 21 53 lbs clamps
" 45 " "
| 98
49

65 10½ oz Edison Sand

3½ oz Dyckerhoff Thru 200
60 cc water

Mould 10-30 AM Wednesday June 14
on " 12-30 " " " "
water 15

June 21 224 lbs OK
212 " clamps
209 " OK
| 645
215 lbs

10.5
2.5
13

28.25
13
8475
2825
36725) 40 367 (10.9
330

10½ 25) 10.2 10 200 (4.08

#66 10½ oz Quartz
2½ oz Dyckerhoff Thru 200
representing about amount of "Thru 200" in 3½ oz Dyckerhoff.
40 ~~33~~ cc water
Moulded 11-45 Wednesday June 14
Out water 2 PM " " 15
Pulled June 21 156 lbs clamp
183 " OK
187 " "
526
175

#67 10½ oz Quartz
3½ oz Dyckerhoff 180-190
40 cc water
Moulded 12-15 Wednesday June 14
out water 2 " " 15
Pulled June 21 34 lbs clamp
33 " "
40 O.K
107
35⅔

See #44

#68 10½ oz Quartz
3½ oz Dyckerhoff 1st run
Thru 200 mesh
40cc water Dry
mould 3 P.M Wednesday June 14
out 5 " " " 15
water
Pulled June 21 168 lbs clamps
146 "
140 "
454
151

#69 10½ oz Quartz
See #45
3½ oz Dyckerhoff 2nd run
Thru 200 mesh
40 cc water ok
Mould 3-30 P.m. Wednesday June 14
out 5 " " " 15
water
Pulled June 21 154 lbs clamps
146
127
427
142⅓

#70 18½ Oz Quartz

3½ oz Dyckerhoff Thru 200

48cc water

Moulded ~~[illegible]~~ 4.00 Wednesday June 14

put 5 " " "

water " 15

Pulled June 21 150 lbs clamp

115 " "

77 " "

3 | 342

114 lbs

#71 4½ oz Quartz
1½ oz Vulcanite Thru 200
40cc water ~~not~~ wetting
June 14 4-30 made plat
on plat 4"X4"
24 hours not hard

72 4½ oz Quartz
1½ " Lehigh Thru 200
40cc water very wetting
on plat 4"X4"
24 hours not hard

#73 4½ oz Quartz
1½ oz alsen Thru 200
40cc water watery
on glass plat
June 14 on plat. 4"X4"
24 hours hard
48 hours harder than #71 & #72

#74 4½ oz Quartz
1½ oz Dyckerhoff Thru 200
40cc water
on glass plate 4"X4"
24 hours hard
48 " harder than #71 & #72

#75 10½ oz Quartz
3½ " 100-140 Dyckerhoff
40 cc water
moulded 9-45 AM Thursday June 15
out 2 AM " " 16
water
Pulled June 22 25 lbs damp
24 " "
23 " "
72
24

#76 10½ oz Quartz
3½ oz 150-160 Dyckerhoff
45 cc water
moulded 10-15 AM Thursday June 15
out 2 P.M " " 16
water
Pulled June 22 23 lbs damp
" " 30 " "
" " 30 " "
83
27⅔

28.25
14
11300
2825
39550) 7500 (19
3955
35450
31595

139

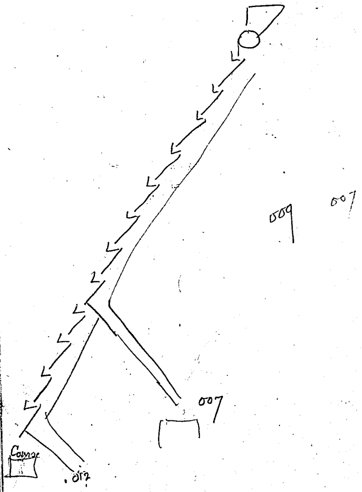
#77 10½ oz Quartz
3½ " 160-170 Dyckerhoff
45 cc water
moulded 10-30 Am Thursday June 15
out 2 P.M. " " 16
water
Pulled June 22 32 lbs. [illegible]
22 " "
21 " "
75
25

#78 10½ oz Quartz
3½ oz Dyckerhoff Thru 200
75 cc water water rose
freely could not reverse pats
Moulded 3 P.M. Thursday June 15
out 5.15 " " 16
water
Pulled June 22 97 lbs ok
119 " lumps
106 " ok
322
107⅓

#79 10½ oz Quartz
3½ " Lehigh Thru 200
75 cc water very wet
Mr Edison made one pot
" " " "
moulded 3 P. M Thursday June 15
out 5-30 " —
water " 16
Pulled June 22 151 lbs clamps
114 " ok
265
132½

#80 10½ oz Quartz
3½ " Alsen Thru 200
75 cc water
moulded 3-15 Thursday June 15
one pot out 5-30 " —
Two " in 9-30 Friday " 16
water " 16
Pulled June 22 132 clamps
156 "
170 ok
458
152⅔

Roller feed to be run by motor
6" roll feed 20 r.p.m.


009
007
007
Coarse
.012

vary proportions
" amounts fed
" in screen plates
vary size at .012

2000
3000
40 up to 6000 -

145

#81 10½ Oz Quartz
3½ oz Vulcanite Thru 200
75cc water very great
Moulded 4. P. M Thursday June 15
out 9-30 Friday " 16
16
water Pulled June 22 159 lbs ok
145 " clamps
202 " ok
506
168⅔

#82 10½ oz Quartz 1 or ~~[illegible]~~ ½
3½ oz Vulcanite ^ Thru 200
45 cc water
Moulded 4-30 Thursday June 15
out 5-30 " " 16
water Pulled June 22 322 lbs. ok
331 " clamps
286 " ok
939
313

#83 10½ oz Quartz
3½ oz Vellosanite 2nd run —
— thru 200
45 cc water
moulded 4-45 Thursday June 15
water 16

Pulled June 22 265 lbs OK
261 " "
257 " "
783
261

#84 10½ oz Quartz
3½ oz Edison thru 200
40 cc water
moulded 9-45 Friday June 16
out Am " "
water moore Foster " 17

Pulled June 23 82 lbs clamps
102 " "
115 " "
299
99⅔

#85 7 oz of Vulcanite taken
and sifted
3½ oz on 200 mesh
10½ oz Quartz
40 cc water OK
Molded 10-10 Friday June 16
out Am " "
water noon " 17
Pulled June 23 71 lbs clamp
69 " "
57 " ok
197
65⅔

86 10½ oz Quartz
3½ oz Vulcanite Thru 200
from 7 oz above mentioned
42 cc water +
Molded 10-30 Friday June 16
out Am " "
water noon " 17
Pulled June 23 289 lbs ok
365 " "
355 " "
1009
336⅓

```
226 ) 350 ( 154
      226
      1240
      1130
       900
```

87 8oz Vulcanite On 100
35cc water = 15.4%
mould 10-45 Friday June 16
out moon " " "
water moon " 17
pulled Jun 23 0 lbs 2 pats
pats cracked badly

88 10½ oz Quartz
3½ " Vulcanite
40 cc water
mould 11-45 Friday June 16
out P.M " " "
water Noon " 17
Pulled June 23 229 lbs OK
187 " "
220 " Clamp
636
212

267
~~35~~

733
35
3665
2199
25655

3672) 3500.(95
33048
19520

#89 10½ oz. Quartz.
3½ oz. Vulcanite, Thom 200
40 cc. water
mould 2-45 Friday June 16
out 5.15 " " "
water noon " 17
Pulled June 23 270 lbs OK
295 " "
315 " "
880
293½

#90 10½ oz. Quartz.
2½ oz. Vulcanite, Thom 200
35 cc. water
mould 3-15 Friday June 16
out 5.30 " " "
water noon " 17
Pulled June 23 210 lbs OK
197 " damp
143 " "
550
183⅓

184) 1000 (5.43
920
800
736
640

00543
0022
323

Freddie [illegible], pays
Riehle wire Dia 0".0024 diam
25 in 1/8" or 200 per inch
~~Sq~~ size hole 0.0025 across
$\boxed{0026}$

New screen
wire 0".0022 diam
has 23 in 1/8" or 184 per inch
hole is 0.004 $\boxed{0.00323}$

# 91 8 oz Vulcanite Thru 200
taken and sifted in 2 oz
lots Two bus sifter
10½ oz Quartz
3½ oz First lot Thru 200
40 cc water
Moulded 4 P.M. Friday June 16
out 5-30 " " "
water noon " 17
Pulled June 23 335 lbs OK near clamp
395 " "
363 " "
1093
364⅓

# 92 2end Lot Thru 200
10½ oz Quartz
3½ oz Vulcanite 2nd Quarter
Thru 200
40 cc water
Moulded 4-30- P.M. Friday June 16
out 5-30 " " "
water noon " 17
Pulled June 23 296 lbs clamp
329 " OK
327 " "
952
317⅓

#93 4th Quarter Vulcanite Thru 200

10½ oz Quartz
3½ oz 4th Quarter Thru 200
40 cc water
Did not stick to brass moulds
it was difficult to turn mould over
Moulded 4.45 P.M. Friday June 16
out 5-45 " "
water noon " 17
Pulled June 23 144 lbs OK
149 " "
135 " clamps
428
132⅔

#94 1st Quarter Alsen Thru 200

10½ oz Quartz
3½ oz Vulcanite Thru 200 1st Quarter
42 cc water
Mould 5-15 Friday June 16
out 5-45 " "
water noon " 17
Pulled June 23 290 lbs OK
272 " clamp
257 " "
819
273 lbs

#95 4th Quarter Alsens
10½ oz Quartz
3½ oz 4th Quarter Alsens
40 cc water
moulded 5-20 P.M. Friday June 16
2 out 5-45 " " "
water noon " 17
Pulled June 23 119 lb clamp
132 " OK
132 " clamp
383 127⅔

#96 Alsens Thru 200 Split into
four parts by screening Thru
200 mesh
10½ oz. Quartz
3½ oz. 4th Quarter Alsen Thru 200
40 cc water
mould 9-15 Am Saturday June 17
water noon " 18
Rolled June 24 92 lb clamp
133 " OK
183 " "
408
136

#97 10½ oz Quartz
3½ oz 1st Quarter Thru 200
Alsens
42cc water
Moulded 9-40 Saturday June 17
water noon " 18
Pulled June 24 280 lbs O.K.
323 " "
332 " Clamp
935
311 2/3

#98 10½ oz Quartz
3½ oz 2nd Quarter Thru 200
Alsens
40cc water
Moulded 10-Am Saturday June 17
water noon " 18
Pulled June 24 242 lbs OK
271 " Clamp
162 " "
675
225

#99 10½ oz Quartz
3½ 3rd Quarter Thru 200
40cc water Alsens
~~Moulded~~ 10-20 AM Saturday June 17
out noon " "
water " " 58
Pulled June 24 298 lbs OK
241 " clamp
234 " OK
773
257⅔

#100 Lehigh spit see #96
4th Quarter on screen
10½ oz Quartz
3½ oz 4th Quartz Thru 200
Lehigh
40 cc water
Moulded 10-45 AM Saturday June 17
out noon " "
water " " 18
Broken June 24 134 lbs clamp
122 " OK
128 " "
384
128

#101 10½ oz Quartz
3½ oz 1st Quartz Thru 200
Lehigh

Moulded 11-15 Am Saturday June 17
air noon " " "
water " " 18
Pulled June 24 300 lbs clamps
295 " OK
204 " "
799
266⅓.

#102 10½ oz Quartz
3½ " Edison as through regular screens about 76 lbs an hour.
38cc water
Mould 9-45 Am Monday June 19
out noon water " " 20
Pulled June 26 39 lbs clamps
37 " OK
38 " "
114
38 lbs

#103 10½ oz Quartz

3½ oz Edison same as in
#102 ground by 500
turns in rotary mortar

40cc water
moulded 10-15 monday June 18
out noon " " 20
Pulled June 26 141 lbs OK
142 " OK
134 " "
417 139

#104 10½ oz Quartz
3½ " Lehigh regular
moulded 11-45 monday June 18
out noon " " 20
Pulled Tuesday June 26 168 lbs Clamp
175 " OK
150 " Clamp
493
164⅓

23-1	Regular	Thru 200	1st Run Thru 200	2nd Run Thru 200	180 - 190	[illegible] On 100
night	142	212	297	261	17½	18
lsen	176	306	287	223	45	105
yckershoff	119	125	117	102		122

Ehrin "500 Turns Reg" #103 139 lbs
" " 3rd ¼ #108 171 "

	3-1		3-1		3-1		3-1		3-1		3-1		3-1		3-1		3-1		#-1		Neat	
	Regular		Three 200.		1st ½ Thru 200		2nd ½ Thru 200		1st ¼ Thru 200		2nd ¼ Thru 200		3rd ¼ Thru 200		4th ¼ Thru 200		180 -190		on 100		on 100	
	% water		% water		% water		% water										%		%		%	
Lehigh	10 x	142 164	9 9.2 19	212 227 132	10	297	10	261	[illegible]	266					10	127	8¾ 9	17 19	15	18	23	15
Alsen	10 12½	58 176	12½ 19	306 156	10	287	10	223	10½ 10½	273 312	10	225	10	258	10 10	127 136	10	45	17	51	30	104
Dyckerhoff	8¾	119	8¾ 11¼ 13¾ 16	125 96 185 203 117	8¾ 10	117 151	8¾ 10	101 142	10	139					10	86	10	36	74.4	122	X 24.3	122 49
Vulcanite			19	169	11¼	313	11¼	261	10	364	10	317			10	133					15.4	0
Atlas	10	152	10	226					10	328					10	169						
Ehrin	10	38			[illegible]	[illegible]			10	85					4th	32						

65
29
94

13.4
278
1072
134
268
29.212

875
25
4375
1750
21875
2112

65 | 875 (13,4
65
225
195
300
260

2.18
875
1093

#105 10½ oz Quartz

3½ oz Edison, Thru 200 again
sifted 1st Quarter

40 cc. water
mixed 12-15 Monday June 19, 1899
set PM " " " —
water
Pulled June 26 110 lbs ok 20
" " 74 " damp
70 " "
254
84⅔

#106 10½ oz. Quartz

3½ oz. Edison Thru 200
4th Quarter on sieve

40 cc. water
mixed 12-45 Monday June 19. 1899
set PM in " 20
water
Pulled June 26. 29 lbs damp
34 " "
32 " "
95
31⅔

#107 10 1/2 oz Quartz
3 1/2 oz Dickerhoff Thru 200
4th Quarter on sieve

40cc water

Moulded 1 — P.M Monday June 19
out ″ water ″ ″ ″ 20
Pulled June 26 86 lbs OK
78 ″ ″
94 ″ damp
258
86

#108 10 1/2 oz Quartz
3 1/2 oz Edison 3rd Quarter
Three 200 Ground 500
times in mortar.
40cc water

Moulded 2-30 P.M. Monday June 19
out 5 water ″ ″ 20
Pulled June 26 158 lbs OK
200 ″ damp
156 ″ ″
514
171 1/3

#109 10½ oz Quartz
3½ oz 1st Quarter Thou
200 Dyckerhoff
40 cc water dry
moulded 3-15 P.M Monday June 19
out 5.30 water " " " 20
Rolled June 26 167 lb clamps
149 " "
101 " "
417
139

#110—10½ oz Quartz
3½ oz Atlas Thou 200
1st Quarter of split
40 cc water
Pats very thoroughly worked home
moulded 4-15 Monday June 19
out 6 water " " 20
Rolled June 26 320 lb OK
336 " "
328 " clamp
984
328

#111 10½ oz Quartz
3½ oz Atlas Thru 200
4 % [illegible] in ocean
40 cc water
moulded 4-30 P.M. Monday June 19
out water 6 " " " " 20
Pulled June 26 165 lbs clamp
159 " ok
184 " "
508
169⅓

#112 10½ oz Quartz
3½ " Atlas Thru 200
40 cc water
moulded 5.30 P.M. Monday June 19
out water 6 " " " 20
Pulled June 26 253 lbs ok
210 " clamp
216 " "
679
226⅓

#113 10½ oz Quartz
3½ oz Atlas
40 cc water

Moulded 5.50 Pm Monday June 19

water
Pulled June 26 173 lbs OK " 22
130 " "
154 "

457

152⅓

June 19 1899 6-P.M

Rolls set down to .25" chain.

6" across corrugations

About 2/3 fresh material

Roller feed up 3½" and rolls refused to take material as fast as it was delivered from roller feed. Material brushed out by lower side of roller feed

80 lbs air

Roller Feed closed to ~~2"~~ 2½"

material ran in O.K. 80 lbs

sample taken at end of 5 minutes

11 Grammes taken

On 100 mes 1.5 15 %
1.85 18.5
6.25 62.5
9.60

June 20: 1899

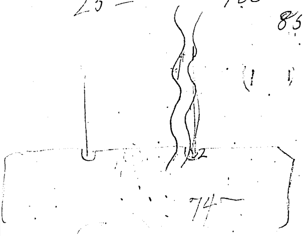
Lot 60	#1	109 lb.	OK
	#2	121 "	clamp
	#3	73 "	OK
Lot 55	#1	213 "	OK
	#2	193 "	"
	#3	203 "	"
Lot 49	1	81	clamp
	2	108	"
	3	99	"
Lot 48	1	46	"
	2	58	"
	3	54	OK
Lot 50	1	170	Clamp
	2	205	OK
	3	181	Clamp for mold
# 46		122	OK

175 —

25 —

100 —

85 —



2 60

12./80.(6,6
72
8 0 .2
32

6/80
13.3 —

2 —

2 1/4 —

2 1/2

June 21 –

Lot. 64 / #1 – 53 lb Clamp.
#2 = 45 " "

65 / 1 = 224 O.K.
2 = 212 Clamp.
3 = 209 O.K.

66 / 1 = 156 Clamp –
2 = 183 O.K.
3 = 187 O.K.

67 / 1 = 34 Clamp.
2 = 33 "
3 = 40 O.K.

68 / 1 = 168 Clamp.
2 = 146 "
3 = 140 "

69 / 1 = 154 "
2 = 146 "
3 = 127 "

70 1 = 150 "
2 = 115 "
3 = 77 "

June 22

Test made

10 Grammes Taken

on 100	1.85	18.5
Thru 200	5.70	57 %

111 Bbls.

92 Bbls of cement 25% on 200 mesh an hour

This grinding was on new clinker from Lehigh

Alsen		% H_2O	Lbs
# 8	Reg	10	58
32	"	12 1/2	176
50	"	15	101

On 100 neat

	% H_2O	
# 29	30	104

Thru 200	% H_2O	
# 33	12 1/2	306
50	19	153

First 1/2 Thru 200

38	10	287

Second

39	10	223

50 | 400 (2.66 [illegible]
300
1000
1900
1000
1

25

400) 2240 (5.6
2000
2400

150
56
90
90
75 00
84
81

25) 8 40 (33
75
90